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The Role and Significance of Alternative Energy Sources in the Implementation of Reforms in the Field of Green Economy in Uzbekistan

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Abstract: The article covers the basics of small business and entrepreneurship, the rational use of energy resources. The impact of green energy on the environment and the stages of development of green energy in modern Uzbekistan. Saving electricity and other non-renewable energy resources. Using renewable energy sources implements the increase.

Keywords: Electric energy, hybrid, technology, hydrocarbon, green energy.

The Uzbekistan Small Business Consulting Program was designed to support small companies that are able to improve their operations and grow their business by engaging experienced consultants, using ETTB grant subsidies to cover part of the cost of such services. developed. “Green” energy-saving technologies, digitalization, and women’s entrepreneurship are priority areas.



Ambient irrigation technology.

Currently, the growth of the planet's population, the development of production and household appliances have led to a significant increase in energy demand [1]. Analyzes and reports show that the current global demand for electricity consumption is increasing at a rate of 2.45% per year, which in turn means that hydrocarbon-based energy sources will dominate the global economy in the next decade. shows that he cannot provide. Currently, the development of the electric power industry using hybrid and controllable renewable energy sources is becoming a global practice, and on this basis production volumes are constantly increasing.

In world experience, the use of mixed and controlled renewable energy sources is one of the priorities of energy security, saving natural resources and effectively solving the electricity problem [2]. The goal of developing software for monitoring the energy consumption of manufacturing enterprises is to improve the use of renewable energy sources integrated with centralized energy supply, continuous monitoring of energy devices and increasing their efficiency based on the use of IOT technology, the quantity and indicators of active and reactive energy used, regular remote and local efficiency control. devices, improvement of the control system based on new software, methods and technologies, creation of a monitoring system [3]. Changing the energy produced, centralized use of various energy sources operating when switched on and not connected to the power grid, improving the description of energy devices, developing and applying, in appropriate cases, measures to replace them with modern ones, measuring the amount and parameters of electrical energy consumed by buildings and equipment based on the development modern software and hardware systems and the introduction of increased energy efficiency through automatic regulation. As a result of the creation of a system for remote monitoring of hybrid energy sources, development and implementation of a database for collecting, processing and evaluating data, as well as software in the format of their presentation, there was a need to predict and provide energy sources that can be identified, the causes of interruptions can be found and they can be quickly eliminated [4].

Software for studying the output parameters of a power system based on renewable energy sources and The experimental model of the simulation stand was used in production practice, the use and practical application of renewable energy sources for the power supply system at facilities in the information and telecommunications sector and other sectors of the economy. The creation of a user-friendly structure and application in production, the creation and experimental application of software for continuous monitoring and control of energy sources will create an opportunity for research, and on this basis, greater economic efficiency will be achieved. ETTB is also supporting Uzbekistan in the development of wind energy projects with a total capacity of 1050 MW. A tender has now been announced for the construction of a 100 MW wind power plant in Karakalpakstan. About 75 companies and organizations are interested in participating in the project.

During his visit to the Syrdarya region on November 16 of this year, the President got acquainted with two large hydropower projects and announced the launch of the project. Getting energy from water is cheaper and more durable than getting energy from other forms. In this regard, water-saving technologies are important. Production As a result of the development of technological processes, the demand for water-saving technologies is growing. In total, from 2016 to 2023, water-saving technologies were introduced on 1.20 million hectares of land (or about 33% of agricultural arable land). It includes technologies such as drip irrigation, sprinkling, discrete irrigation, elastic pipe, irrigation; over the years, 630 thousand hectares of land have been leveled with the help of a laser.

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